

Digital Hardware Design Laboratory (DHL)

Bulletin for the Lab

Institut für Technik der Informationsverarbeitung, Karlsruher Institut für Technologie (KIT)

1 Preparation

To ensure the success of the exercises, a thorough preparation at home according to the provided problem description and additional data sheets and information is indispensable.

The description of exercises and other documents are available exclusively on the web pages of the ILIAS platform.

2 Execution of the lab

The exercises will be executed in our institute. Basically the groups consist of two students which share one computer. For the first four exercises, a time-span of 4 hours is planned. This should be enough time if prepared thoroughly. The implementation of the image processing core is distributed over seven afternoons; the participants are responsible for their own scheduling.

All tools required for the exercises are installed on the PCs in the laboratory. If you have questions regarding the handling of the tools or in case of malfunction, please ask a tutor or an attendant.

3 Work report

For the introductory exercises and the afternoons dealing with the implementation of the Feature Extraction, a detailed report has to be prepared by every group, which should be provided in electronic form. Each report should contain the following points:

- Problem description / overview about the work on the specific afternoon
- Proceeding
- Drawings, Calculations
- Results

For the four introductory exercises one report each and the feature extraction IP three reports in total need to be created and uploaded through the ILIAS platform. For the latter three, one report for the *Converter Filter Component*, the *Region Detection Component* and a summarizing report for the whole *Feature Extraction IP* in the end of the laboratory needs to be created.

The reports must be uploaded to the ILIAS platform within the deadline specified on the upload site. We will randomly pick some of the reports and review them in detail.

Advice: The admission to the examination at the end of the laboratory requires the participation in the lab afternoons and the existence of **all work reports**.

4 Rating, Examination

The work done in the course of the lab has to be done accurately and the reports have to be arranged and structured accordingly. The complexity and contents of the reports is subject to the guidelines given in 3) and will be checked and noted.

In total **100 points** can be scored during the laboratory. The **work reports** are rated at the end of the semester and they provide at most **20 points to the overall score**.

In the **oral examination** maximally **80 points can be scored**. We advise to work through the exercises thoroughly, as the examination refers to the complete spectrum of subjects which were dealt with

in the lab. All the scored points will be summed and converted into a grade.

For the oral exam we advise to work through the exercises thoroughly, as the examination refers to the complete spectrum of subjects which were dealt with in the lab.

The admission to the examination requires the participation in all lab afternoons and the existence of **all work reports**. Special treatment will only be allowed in reasonable cases.

5 Illness / Absence

Basically, **attendance is compulsory** for the complete lab! In case of absence through illness a medical attestation must be provided. In case of other predictable but inevitable circumstances, the supervisors have to be informed beforehand. Delayed excuses will not be accepted and lead to the exclusion of the lab.

All missed lab hours have to be reworked in your own time and responsibility. In this time there is no claim of supervision through tutors or attendants. Necessary hardware can be provided after a consultation with a supervisor.

6 General lab guidelines

In the lab room, eating and smoking as well as drinking of alcoholic beverages is not allowed. In case of non-alcoholic beverages, you have to be careful not to pollute, damage or destroy the devices in the lab room.

The complete environment and the devices provided are the property of the Karlsruhe Institute of Technology and have to be handled with care. Engagement in the devices or their wiring (reconnection of devices, opening of computers), if not allowed directly by the supervisors, is not allowed and leads to the exclusion from the lab. You can be made liable for wantonly negligent treatment of the devices (e.g. computers, monitors, test hardware, lab equipment).

It is not allowed to copy any kind of provided software from the computers or take it away from the lab, as far as products are concerned that are not declared as freeware or were provided for general and free usage.

It is not allowed to install or handle your own software on the computers, as far as software is concerned that was not specifically created within the context of the laboratory course. You can be made liable for damages induced by such software.

The workspaces are to be tidied after the exercises and to be left in a clean state. The chairs are to be pushed close to the desks. If you are the last person to leave the lab classroom, close the windows, switch off the lights and lock the door.

7 Final provisions

You received two copies of this bulletin. Fill out one copy, sign it and return it to the supervisors.

I have read and understood this bulletin completely.

Karlsruhe, (Date)

Last Name, First Name:

Matriculation Number:

Signature: